

United States Department of Agriculture  
Extension Service  
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X Report of the

North Central States Regional Conference of Extension Foresters

Allerton Memorial Park near Monticello, Ill.  
April 10-12, 1950

When the extension foresters of the North Central States met at Madison, Wis., in February 1942, the principal theme of the conference was Extension's opportunities and obligations to meet the wartime needs for timber while attempting to prevent such destructive liquidation of farm forestry resources as would hurt the future farm economy and impair the soil. Since then, with the termination of the war, our economy has returned to a peacetime basis, and farm products, including timber, are to an increasing degree entering a buyers' market. But in the meantime vast strides have been made in mechanizing farm forestry operations, including tree planting, and research in utilization is beginning to create markets for timber from trees that were largely classed as weeds in the past. Greater emphasis is being placed on the economics of timber as a crop. Expansion of farm woodland service by foresters employed jointly by the United States Forest Service and the several State foresters makes more imperative than ever efficient working agreements between extension agencies committed generally to the educational phases of farm forestry promotion, and State forestry agencies committed generally to the service phase. In the conference here reported all these and related topics were discussed and recommendations suggested for improving the effectiveness of the extension phase of farm forestry work.

I. Training Methods and Teaching Aids

A. County Extension Personnel

Problem: It is recognized that, according to human nature, county extension workers tend to promote subject-matter projects with which they are familiar. Because many county extension workers lack background and training in farm forestry this has too often been a neglected phase of the county program.

Recommendations: (1) Subject-matter training schools and district and personal conferences should be used to provide recognition of farm forestry problems and to improve leadership. (2) Subject matter on forestry should be included in orientation programs for new personnel. (3) To prepare for prospective agricultural leadership of students training for county extension and vocational agricultural work, it is strongly recommended that the agricultural college require at least one course in farm forestry as part of that training.

B. County or District Extension Foresters and Project Farm Foresters

Problem: Forestry on the farm is essentially a farm operation rather than a forest operation. In some cases, project farm foresters lack an understanding of this fact.

Recommendations: Training should be provided to aid foresters working on farm forestry problems to develop a proper perspective of the relation of forestry to other phases of the farm enterprise.

C. Teaching Aids

Problem: Subject matter should be designed to teach the county agent and aid him in his county program as well as inform rural groups. There is a need for visual aid material, circular letters, single-subject leaflets, bulletins, and displays suitable for county use.

Recommendations: Visual aids and other types of teaching aids suitable for county use should be prepared and made available. Joint State publications dealing with subject matter applicable to more than one State may effect economies, but publications Nation-wide in scope frequently lack local application. (Note: Michigan, Minnesota, and Wisconsin are currently working on a joint publication project in forestry publications.)

II. Cooperation With Other Agencies

A. State Level - State Forestry Departments

Problem: There are many "twilight" zones when a distinction is attempted between educational services and technical assistance. In some States cooperation between extension foresters and project farm foresters has not been close, yet the Extension Service has facilities for educational work among farm people which State forestry departments generally lack. Under the Smith-Lever Act there is nothing to prevent extension personnel from doing personal service work, although precedent is against it because of limitation of time and personnel.

Recommendations: (1) A memorandum of understanding between a State Extension Service and a State forestry agency is desirable. (2) Co-operative relations should be established to prevent duplication of effort and to coordinate programs.

State Level - Soil Conservation Service

Problem: The farm planners of the Soil Conservation Service are in a position to promote farm forestry programs effectively. In some States a forester-at-large is available for work with farm planners in giving them forestry training and in making them forestry-conscious. Other States have no such personnel, although many of the farm planners may be foresters by training. There is a need for closer coordination of programs and dissemination of information to Soil Conservation Service personnel.

Recommendations: Soil Conservation Service foresters should check with the Experiment Stations and Forest Service on subject-matter recommendations. Monthly news letters sent out by extension personnel are an effective medium for dissemination of information to technicians and fieldmen.

State Level - United States Forest Service

Problems: There is sometimes a lack of information between the Extension Service and Forest Service on respective programs in the field of farm forestry. In some cases methods or techniques used by the agencies may differ.

Recommendations: It is suggested that the agencies interchange information concerning the farm forestry programs in each State and that each agency be given an opportunity for a critical review of techniques suggested for management, tree planting, and other farm forestry activities.

B. County Level

Problem: Local groups must provide much of the leadership if conservation is to be actually practiced on the land. Further than that, the work of all agencies working with farmers must be integrated.

Recommendations: In view of the many public agencies in each county that have some responsibilities in related conservation fields, it is recommended that extension take the lead in organizing forestry councils in those counties where the farm woodland is an important economic element. Membership should include project farm foresters, Soil Conservation Service farm planners, production and marketing personnel, local game or conservation warden, county superintendent of schools, county extension personnel, and representative farmers. The function of this council should be to determine the areas of responsibility for each agency, to review critically the programs for each agency, and to suggest possible lines of activity that will promote farm forestry in the county.

In the absence of county committees on forestry, the scope and nature of activities should be agreed upon to prevent overlapping of the activities and efforts of extension personnel and project farm foresters.

III. Supplemental Training for Extension Foresters in Utilization

Problem: The local lumber market can be the most profitable outlet for many farm woodland products provided local processors are able and equipped to manufacture lumber sufficiently finished for a wide range of uses. Many of these processors are themselves farmers who offer a valuable custom service to their neighbors. They need advice and instruction on improved processing techniques, and often look to the Extension Service for help. Extension foresters, in turn, are in better position to advise on and to demonstrate improved equipment and use of machinery when they have the benefit of advanced instruction offered by technicians of the Forest Products Laboratory and of equipment manufacturers.

Recommendations: State extension foresters should be permitted to accept the offer of the University of Illinois to make available its facilities at Siissippi Farms (near Oregon, Ill.) for a special saw-mill and forest utilization training period. They should also be permitted to accept the offer of the Forest Products Laboratory, as reported informally by Mr. Fobes, to help in any possible way, in a short training period better to equip extension foresters to hold educational meetings with sawmill operators in improved processing of farm-produced lumber. Supplementing this type of instruction will be series of bulletins and instructions on the operation of machines in logging and utilization, prepared by the Forest Products Laboratory, which should be used by extension foresters in their contacts with mill operators.

#### IV. Forestry Research Offering More Immediate Application

Problem: To support appeals based on the economic returns of farm forest management it appears both desirable and possible to orient more research projects which can give useful information after a relatively short time, as compared with the results to be expected from more fundamental research. These would include studies to provide data on comparative income from grazed and ungrazed stands, maple sap production in grazed and ungrazed maple stands, methods for quick determination of sugar-producing qualities of trees, short-term growth rates, timber preservation with latest preservatives, and protection against disease and insect pests with latest chemicals.

Recommendations: (1) Because the Federal forest experiment stations are necessarily committed to considerable basic research region-wide in nature, the State directors of extension could be helpful in directing the attention of the State experiment stations to the need for more forestry research conducted by the States. (2) Request the Federal forest experiment stations to invite representation of the State extension service when plans for research touching on farm forestry are under consideration, or new lines of forest research are being contemplated. (3) Request more studies on utilization of waste forest products subject to conversion into soil-building material and livestock bedding through the use of sawdust, and of economical chippers to convert slash and thinnings into chips that reduce fire hazards following logging operations and supply economical sources of organic matter.

#### V. Forest Planting and Planting Machines

##### A. Forest Planting

Problem: Mr. Diehl, of the U. S. Forest Service, called attention to plans of that agency to curtail its nursery seeding schedules, in consequence of which the distribution in the future of surplus stocks to the States from Federal nurseries will probably cease. With the longer period required in Northern States for the production of nursery trees of suitable size for forest planting as compared with the short production period required in Southern States

there is a need for a sustained, and a larger, seeding and transplanting schedule by State agencies to meet the prospect of increased demand for planting stock. Competing with demand for increased forest-tree production in State nurseries is a growing pressure on the part of organized sportsmen's groups to divert more nursery facilities for the production of game food and cover plants, principally shrubs.

Recommendations: To avoid possible overproduction of certain age and size classes of nursery stock and of underproduction of others, it is believed effective results can be had if extension foresters report regularly to their State foresters on planting outlook, and advise on probable species and size class preferences, and on regional areas within the State where emphasis on forest planting is to be placed at specific times. To the extent that pressure from outside groups may be brought upon State foresters to increase nursery facilities for game food species production at the expense of forest tree seedlings, the State extension services should make clear to State forestry agencies that sustained supplies of forest planting stock are essential to continued interest in the farm forestry project.

#### B. Forest Planting Machines

Status of Development: Planting machines have been a significant factor in increased forest planting on farms. It appears that no planter has been designed yet, or is likely to be designed, which will work uniformly well on all planting sites.

Recommendations: Research in design is still needed for machines designed to function specifically on heavy-brush land, on steep hillsides, on stony lands of morainal origin, and on heavy soils where uniform closure of soil around roots is difficult to achieve. Survival studies, and studies of root development after planting by machines of the principal designs now on the market, can help prevent long-continued use of machines that are faulty in function in such a way as to affect vegetative competition, packing of soil around roots, and placement of roots between vertical planes. Extension foresters should assume leadership in making observations that might help machine designers to improve on the efficiency of tree-planting machines on farms. A State extension forester should have a tree-planting machine available for demonstration purposes.

#### VI. Marketing Aids

Problem: Marketing still remains a critical aspect of realizing maximum income from the farm timber crop, and the expanded use of farm timber products locally offers one of the most promising ways of improving the market. Profitable marketing has its beginning in proper harvesting, a knowledge of industrial specifications and needs, a knowledge of stumpage volumes, and the relative merits of selling by measure or scale of standing or cut products, or of lump-sum timber sales. Lack of up-to-date information on markets and market prices will place the farmer in an unfavorable bargaining position. Rarely does he have the benefit of cooperative marketing organization to aid him in reaching industrial outlets. The Research and Marketing Act offers several approaches, including education and basic research designed to promote timber salvage and the use of chemical derivatives of wood.

Recommendations: A market outlet and price information service, similar to the one developed in Wisconsin, is recommended for all States where farm timber resources represent a substantial part of the saw-log timber of the State. Market reports might well be published as supplements to any economic or market reports published by the college of agriculture, but where long delays in publication may result through contract arrangements with a State printer, consideration should be given to the use of trade journals, followed by the purchase of reprints for additional distribution, as a means of making market reports available promptly. Supplementing the periodic market price reports, there must be a relatively up-to-date directory of primary and secondary wood-using industries, giving special emphasis to those secondary industries that draw largely on local mills for rough lumber.

Since title II of the Research and Marketing Act appears to offer the best opportunity for studies in market opportunities for farm forest products, including the promotional phase of marketing, it is recommended that extension directors review the possibilities of making available any matching funds that would permit a forestry project under this title. To the extent that such a project can be oriented to aid in promoting cooperative log pools it should be so planned, but active log pools in cooperative marketing should be promoted with or without assistance from the Research and Marketing Act.

## VII. Emphasizing the Economics of Farm Forestry

### A. Farm Woods Account Forms

Nature and Status of Problem: For farmers who seek information as to the value of the farm woods as an investment or business enterprise, the development and maintenance of woodland account records can ultimately provide sound local data. There need be no concern over the development of standard account forms for all states. The situations in the respective states will probably dictate the direction and extent of this activity. Cost account records accumulated by project foresters may eventually be valuable information and extension foresters can be alert to this source of data. Farm management account books should provide adequate space for listing farm forest products.

Recommendations: It is suggested that close liaison between rural economic departments and extension foresters will stimulate development and expansion of farm woodland cost account records.

### B. Permanent Woodland Demonstration Areas

Nature and Status of Problem: The creation of permanent demonstration areas is an excellent extension activity, not only for the opportunity they provide for in-the-woods teaching, but also for the chance to make informal, applied studies on the nature of growth, reproduction, and mortality under very localized conditions.

Such areas, moreover, can be a source of much significant information on cost accounts and labor income. About 60 of these permanent demonstration areas are currently being established in Ohio by the Agricultural Experiment Station. Considerable research data will be obtained from these areas, which are located on private land by agreement with the farmer. Likewise, the Agricultural Experiment Station in Illinois has several similar areas. Indiana is creating such tracts primarily for their demonstration value, but with a secondary objective of providing information on current inventory, growth, labor input, and earnings. Wisconsin has 11 permanent "timber harvest tracts" which serve the primary function of demonstrating good farm woods management.

Recommendations: There are opportunities open to extension foresters to build up accurate records over a period of years on tracts of land not subject to sudden changes in ownership and management policies. It is recommended that small areas of publicly owned forested land in farming communities be investigated as possible sites for permanent demonstration forests in which economics will be emphasized no less than the silvical features.

#### C. Achieving Reduced Grazing Through Grassland Farming

Nature and Status of Problem: The grazing of woodland still presents a major problem in developing management plans that necessarily involve reliance upon cutting methods for successive crops of timber. It may be classed as a problem in management, but fundamentally it is a problem in economics, for woodland grazing is a reflection of the pressure for adequate forage upon many operating farms. To the extent that better forage can be had more economically by other means this pressure can be lifted.

Recommendations: Extension forestry can best pursue its objective of reducing destructive grazing of woodlands by (1) encouraging better land classification to separate woodland from pasture land, and (2) encouraging development of improved pastures. These are "back door" approaches to getting better forestry in the farm woods, yet are likely to be very effective. Cooperation between extension foresters, agronomists, county agents, and soils specialists are indicated activities.

#### D. Forestry in Home and Farm Planning

Recommendations: Farm forestry subject matter should be incorporated with the subject matter of other extension specialists, such as farm management, horticulture, and home planning, in developing complete farm plans.

The chairmen and secretaries listed on the topic outline presented their respective reports, which in turn were assembled and put into shape by Fred Trenk.

